

# ***RURAL DEVELOPMENT FORESTRY NETWORK***

INCENTIVES IN COMMUNITY FORESTRY PROJECTS:  
A HELP OR A HINDRANCE?

*Alan Smith*

*Alan Smith* is Team Leader for the Programa de Repoblamiento Forestal (CORDECO-Intercooperation-COTESU) based in Cochabamba, Bolivia.

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## INTRODUCTION

The recent FAO review of Community Forestry (Arnold, 1992) makes the following comment:

"Little is known yet about the effectiveness of the project interventions which are employed to stimulate tree growing....Until more is understood about the role of trees in different farming systems, and about the factors which distort farmers' decisions about tree growing, it will be difficult to define and design appropriate interventions."

Despite this evident truth, it still seems that few of the actors in the forestry sector have taken the necessary time for reflection before initiating interventions, one group of which is labelled "incentives". Most community forestry programmes use external incentives in one form or another to promote their aims. The justification most often given is that it is initially necessary to use them to introduce the target population to ideas and practices that they may otherwise not adopt through purely explanatory and demonstrative methods of extension. The hope is that, once their effect is achieved, they may be withdrawn and the desired sustainable development take place.

In reality it seems that this scenario is optimistic. The effectiveness of incentives in inculcating forestry values may be obscured by the need to meet quantitative project objectives (number of trees planted, number of communal nurseries), and the incentives often assume the function of bribes. Worse still, apathy may result. As Gamsler (1987) has noted,

"it had been assumed that a small financial input would remove whatever reluctance had retarded farmers' inclusion of trees in their agricultural systems. Instead, the farmers, feeling that they had been awarded a prize, tended to sit back and wait for the ERC (USAID) foresters to deliver it to them".

The theme of this paper is this. Are we deceiving ourselves about the nature of external incentives? Do they not become in many cases subsidies which have to be maintained or else the new practices will be abandoned? If so, not only is there no sustainability but do not incentives risk fostering dependence and paternalism? If that is so, do they not work counter to the accepted social forestry goals of inducing greater grass roots participation and responsibility? "We seek growth in autonomy and (instead) we create dependency" (COSUDE, 1991). The paper does not touch upon legal incentives (exploitation rights, exemption from taxes etc) which are dealt with by Thomson (1992).

## SOME KEY CONCEPTS

Without entering into detailed definitions, it is worth briefly identifying the key terms employed in the forestry context.

### External incentives

These are inducements derived from a source outside the community, which have a direct or indirect financial value, and are intended to bring about a change of behaviour in the recipients. Such incentives include food for work, piece rate wages, the donation of inputs, the construction of communal facilities, soft loans etc; the list is endless. The benefits generated by the product of the change (for example, income from sales) are not considered external incentives. Some incentives may be directly related to forestry activities, others only tenuously (the 'bribes'). Arguably technical assistance and technical training are also incentives but, as they are integral to any extension-oriented project, they are not included in this discussion. An incentive implies a transitional measure which is withdrawn once the desired change is established.

### Subsidy

A subsidy implies a long-term financial inducement to maintain a desired behaviour which yields benefits not only to the recipients but to the society in general. For example, agricultural prices may be subsidised for reasons of food security or social welfare. In forestry, the protection of the environment could justify a state subsidy for counter-erosion measures.

### Sustainability

This refers to the long-term durability of an activity once the outside assistance is removed. It implies reliance on existing local resources, be they financial or human, or the generation of such resources through the introduced activity.

### Externalities

These may be positive or negative, and can be defined as the normally unintentional effects that actions by one person or group have on another person or group. However it may also be the case that such effects are recognised as beneficial/detrimental by society as a whole, and the individual is encouraged/discouraged to continue. Government-sponsored natural forest conservation comes into this category.

### Participation

In this paper, the version referred to is that of:

"transformational participation...when participation is viewed as an objective in and of itself, and as a means for achieving some higher objective such as self-help and/or sustainability" (Kruks, 1983).

### Paternalism

In essence, gaining and exercising power through patronage, i.e. by developing patron-client relationships. Incentives can be very useful means to achieve this, even though there may be no deliberate intent. Paternalism is the converse of participation.

## USE OF INCENTIVES IN THE BOLIVIAN REAFFORESTATION PROJECT - PROFOR

As the theme is a sensitive one, only the example of the author's own project will be specifically examined. The Swiss-financed Programa de Repoblamiento Forestal (PROFOR), the reforestation project of the regional development corporation of Cochabamba in central Bolivia, has worked since 1984 with around 300 rural communities. They collectively plant some 1,000 hectares of forest each year, mainly with exotic species (*Pinus* spp., *Eucalyptus* spp.) but with an increasing proportion of native species.

The overall objective of the project is to consolidate participative rural forestry which strengthens the economy of the peasant farmer population. To achieve this, PROFOR has encouraged the development of both commercial plantations (for sale of timber for carpentry and other uses) and planting for domestic purposes (the provision of fuelwood, construction materials etc). There is also a minor component of planting and associated measures to protect against erosion. PROFOR and a counterpart NGO between them produce seedlings in 12 central nurseries for distribution to the communities. The communities themselves undertake the planting and subsequent management of the woods.

PROFOR has used a range of incentives to stimulate interest in communal forestry, which are outlined below.

### Food

Between 1984 and 1987, the project provided food to the communities in exchange for planting a certain number of trees. This certainly succeeded in introducing forestry practices to the rural population but the advantage was heavily outweighed by the negative aspects. The farmers valued the food more than the trees. The technical quality of the plantations was poor as the communities sought only to fulfil their quota and receive the food, and the distribution of foodstuffs led at times to internal arguments in the community over who should get what.

### Provision of external labour

Also between 1984 and 1987, external labour, particularly soldiers, were employed to plant on community land. Apart from the poor technical quality of the plantations, this had the serious drawback of reducing communal participation solely to the provision of land. Furthermore, it set precedents for the rural population to expect that someone else would provide the labour.

### Road construction

Between 1987 and 1993, a powerful 'incentive' was introduced, in the form of road construction. Initially conceived as building access roads to the plantations or potential zones for planting, nearly all the roads constructed had only a very limited direct forestry application. Most were regarded by the rural population as links for the transport of their agricultural produce to the markets. The forestry rationale was soon forgotten by the project staff themselves. More often than not the concept was: "if you (the community) agree to plant a certain number of trees, we will build you a road". Thus the offer of a road became a bribe to plant, the community valuing the road much more than the trees. So 'successful' was the incentive that the project became swamped with requests for roads, to the extent that some communities made their participation

in the project conditional upon road provision. Moreover, the inability to meet all the demands led on occasion to conflict between the community concerned and the project. PROFOR came to be seen as a road-building rather than forestry project!

An additional important factor was the high cost of road construction – up to \$20,000 per kilometre depending on the terrain. This became a disproportionate use of the project's financial resources, diverting funds away from directly relevant forestry activities, not least extension. How could this activity be sustained over time, assuming that the principal reason for the roads was forestry access and not an incentive as such? The project therefore abandoned road building. The question of access is treated by better planning of plantation location, and by liaising with road-building institutions where genuine forestry access is required.

### Fencing

During 1986 to 1988, barbed wire and posts were offered to those who planted more than five hectares at a single site. Although damage by animals continues to be a problem, it was decided to abandon this practice on grounds of cost and, more importantly, the realisation that barbed wire in itself is not a guarantee of protection. A farmer can always pull down the fence to permit his cattle to graze in the plantation. The temptation to do this is the more so because once the fence is installed, the pasture grows better. The answer to the problem is to step up extension activities, stressing the need to protect the plantation against animal depredation by actively controlling animals instead of relying passively on a fence.

### Other incentives

Additional incentives provided by the project at various times were:

- ! the donation of materials for communal purposes
- ! the transport of building materials for the community
- ! construction of communal facilities (sports areas etc)
- ! assistance in dealings with government agencies
- ! the financing of social events
- ! the provision of tools and equipment
- ! the subsidising of travels costs to communal forestry organisations meetings, and the provision of meals at these meetings.

Of these, only the last two remain. The supply of tools (mainly pickaxes) is justified on the grounds that there are insufficient in the community at the peak period of planting. The financing of the forestry organisations meetings is seen as a temporary measure until such time as these embryonic associations establish themselves and can fund their own activities.

### Seedling supply under long-term credit

Apart from the provision of technical advice and training, which can be considered the 'core' incentives of any extension project, the most important external incentive remaining in PROFOR is the supply of seedlings under a form of long-term credit. A contract is drawn up with each participating community. This stipulates that, at the time of the first commercial intervention, the community pay a percentage of the income derived to the regional development corporation. The percentage varies according to the species (the greatest is for *Eucalyptus* spp., the smallest for native spp.) and moreover is not applicable to plantations for domestic or protection purposes. The trees not destined for sale are a clear subsidy from the project, justified in terms of social externalities. However some 75% of the plantations are for commercial or multi-purpose ends. The revenue received by the regional development corporation will go into a fund to be reinvested in the forestry sector in activities such as research. It remains to be seen whether the contracts will be adhered to but the first indications are that the communities will comply.

PROFOR is revising its policies of seedling production in central nurseries, primarily for reasons of sustainability. Falconer and Arnold (1991) argue that subsidising tree seedling supplies is not worthwhile as poor farmers are in any event ready to adopt tree growing because of its low capital cost. It may be better to promote production in the farmers' own nurseries on a low input basis. However, experience elsewhere has shown that some of the most glaring examples of subsidy occur in so-called communal nurseries, with inputs freely provided and wages paid by outside organisations (Kerkhof, 1990).

#### THE PROFOR INCENTIVES POLICY

As a result of its experience, PROFOR has developed a more coherent, if still imperfect, policy. The attempt is to balance the aims of increasing awareness and adoption with the need for meaningful participation in the context of the ultimate goal of sustainability. The policy is based on the following conceptual elements (PROFOR, 1993):

1. The relationship between the farming communities and PROFOR should be transparent (no hidden agenda) and not generate dependency.
2. The initial assistance of PROFOR to the communities should not affect the subsequent sustainability of the farmers' forestry activities, and should set aside any notion of paternalism.
3. The adoption of any forestry proposal by the communities should originate in the value ascribed to the forestry resources or practices and not in the incentive selected.
4. The cost-benefit relationship should be clearly established to enable a conscious decision to be taken by the communities (thus the project is not the final arbiter).

#### THE PROJECT SELF-PRESERVATION MOTIVE FOR INCENTIVES

Since cutting back on incentives, PROFOR has not noticed any diminution of interest on the part of the rural populations to continue planting at the same rate as before. In fact, communities who

had no contact hitherto with PROFOR have asked to be included in the programme. Why then do other projects persist with the use of foodstuffs, fencing, input supply, even the payment of cash for labour? If it is necessary to continue with these 'incentives', where is the sustainability of the activity? Would it not be better to call a spade a spade, or a subsidy a subsidy, and if this is justifiable in terms of externalities, think more how to ensure the long-run financing of the subsidised service once the donor withdraws? Of course the reality is more complex and, for very good reasons, subsidy is not a popular word in the development vocabulary.

The author's hypothesis is that the incentives are necessary more to the project than the recipients, who will have managed without them before the advent of the project. Firstly, it is much easier to gain entry by offering an inducement with a financial value, rather than undertaking an in-depth extension programme based on explaining the merits of forestry. This enables the project to claim early results. It is no coincidence that the newer projects tend to be much heavier users of incentives than the longer-established ones. The reason that the older projects are more modest users is not that the earlier, now-abandoned, incentives were successful but that they were found to be of little lasting impact.

A further factor is that the provision of incentives puts the giver in an agreeable position of power through control of the resources. The judicious use of incentives can enhance one's prestige and popularity wonderfully. Project staff thus become clear gainers and have a vested interest in the continuation of the practice.

There sometimes appears to be a competitive 'battlefield' between organisations to win friends and influence people by resorting to handouts under the guise of incentives. NGOs are particularly prone to this as their very existence may depend on presenting to prospective donors the image of an active presence in the field. The aim is more to perpetuate the organisation than anything else, the dependence of a client population being a central tenet in this.

A less cynical view is the genuinely held humanitarian one. This argues that by offering incentives, you are providing an immediate relief for poverty at the same time. In this case the incentive factor is highly secondary, and the consequences in the long-term may be seriously negative if the target group becomes dependent. Moreover, one project's incentive may adversely affect another project's operations and the hidden agenda of spreading one's sphere of influence then comes into play. An anecdote will serve to illustrate this.

Some communities with whom PROFOR had worked for years indicated that they no longer wanted to continue in the programme. The reason was that a church-backed NGO had entered their area and, to gain their adherence, was not only offering seedlings at no cost but would provide food in exchange for planting. Naturally the community chose the NGO option, even though they would have planted trees anyway. The NGO was contacted by the project and to our surprise we learned that they had bought the seedlings from PROFOR and were intending to distribute them, with no technical support, along food for work lines. They explained that not only would they be improving the environment through tree-planting but they were alleviating poverty by donating food. In their view, their policy was beautifully simple in contributing to both humanitarian and environmental aims at the same time. There were no free gifts as the farmers were providing their labour. The concept of sustainable forestry had no relevance for the NGO, but their desire to build up client relationships in a new territory certainly had.

## SUSTAINABILITY

With the exception of the type of NGO cited above, most donor-backed projects include sustainability as a necessary condition. However, a fair number argue that, although sustainability is a laudable aim, they themselves are not yet in a position to abandon incentives or subsidies. Usually these arguments are based on social, not economic, criteria. There is thus an aversion to consider the basic elements of how much it all costs in relation to the economic returns: is it necessary to continue the support over time; and, if so, how can it be maintained by purely local resources? In other words, cost becomes subsidiary to in-vogue concepts such as participation, self-management, cultural compatibility, indigenous knowledge etc. Important as these are in the transfer of a technology or practice, they become meaningless in the context of the specific goal of sustainable social forestry if the forestry activities do not generate perceived economic benefits for the community. In the absence of continuing subsidies, there has to be a net pay-off for the rural population to want to continue the activity, be it increased income, increased availability of fuelwood, reduced soil erosion etc. This will also have a demonstration effect on other communities. In the long-run, the best incentives are the financial gains to be made through forestry or the use to which the trees may be put.

Even if the income-generation potential of forestry is not on its own sufficient to ensure sustainability, there may still be a case for arguing that externalities warrant continuing external support. This would indicate the need for a subsidy, although the concept is not currently in favour as it appears to contradict the sustainability ethos. However, sustainability may not be threatened if there is a local organisation able to continue the funding from local resources. This implies a change of focus. Rather than viewing the rural communities as the autonomous agents of their own well-being, state institutions or NGOs must be explicitly involved in the long-term development process. For instance, government or NGO-run central nurseries may be a more sustainable option than communal nurseries. The challenge would then be to ensure the continued financing at the institutional level, which indicates the need to aim for low recurrent costs.

## CONCLUSIONS

The experience of PROFOR has shown that the heavy-handed use of incentives can cause more problems than it solves, not least by inducing paternalism, creating conflicts and devaluing forestry objectives. Full participation cannot evolve if one party is constantly resorting to 'incentives' to buy the willingness of the other party. In general, the more participation there is by a community in project-promoted activities, and the more use there is of community resources, the more likely these activities will be sustained after the project withdraws – the community having made its own investment. In this respect, low input technology is probably better than high input (but not inevitably so). The successful private farmer nurseries in Mwanza, Tanzania appear to bear this out (Guggenberger *et al*, 1989).

There is also a danger that the incentive will be valued more than the practice it is designed to promote, as was the case with road-building in PROFOR and with Gamser's project in Sudan:

"The continuing influx of new applications (for grants for seedlings) seemed to indicate the farmers' enthusiasm for a free handout of any sort, rather than a desire to support farm forestry, if the subsequent slow planting-out rate was anything to

go by" (Gamser, 1987).

Once the practice of offering such enticements is established, it may prove difficult to withdraw them. Thomson (1992) makes the point, based on experiences in Nigeria:

"Paying for changes in recipients' behaviour and then phasing out support generally undermines project sustainability and local initiative. Producers reasonably conclude that if outsiders or the government paid them once, they can be induced to pay again if producers are prepared to strike until they get the 'going rate'".

Not only are the recipients at risk of becoming addicted to incentives, the project staff may also derive power and influence from the practice, and be reluctant to abandon the reliance on them for a more rigorous and participative approach to extension. Such has been the experience in PROFOR, despite the best efforts of the project management to reorient the extensionists' attitudes away from '*asistencialismo*' towards much more real participation. However old habits die hard, especially when it means surrendering some degree of power.

Finally, too little thought is given to the financial costs involved, the distortion of resource use this entails, and the inability to sustain certain activities from local funding alone. In many donor-funded projects, the ready availability of funds at the inception of the project is a temptation to spend indiscriminately to obtain quick results. The difficult question of sustainability is left to a later phase. However, by this time it may be too late; the damage has been done. Rarely are cost-benefit calculations attempted *ex-ante* for the use of incentives. It is as if economic criteria were somehow irrelevant, although the ultimate justification is generally given that the change desired is going to be economically beneficial. Much more rigour is required in terms of economic analysis and viability, as well as in the technical and social aspects.

In the view of the author, external incentives should be used sparingly, and the potentially negative indirect effects considered carefully, before the incentive is introduced. An in-depth reflection of the wider consequences is an essential precondition before initiating a process which may not be easily reversed. An incentive should not induce dependence, nor diminish local initiative. It should also not be valued more than the result it is intended to achieve. The utility of an incentive should be judged both by its effectiveness in motivating the desired change (always taking into account the felt needs and socio-cultural perspectives of the target group) and by whether motivation will be maintained after incentive withdrawal. In other words, the incentive should be the catalyst for the change and not the **cause** of the change. If it is necessary to continue using the incentive to maintain the change, the objectives sought should be re-examined in the light of their wider socio-economic benefits. If the balance of social costs and benefits justifies it, the question arises of whether a long-term subsidy can be financed from local institutional sources. As a general principle, the best incentive is the economic benefit to the individual derived from a new practice.

As the issue is contentious, it would be interesting to learn of other projects' experiences in using incentives, and whether there is some agreement with the conclusions above. There is undoubtedly a scarcity of debate in the literature on this very important subject.

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